Amendment to the Claims

In the Claims:

Please amend Claims 1, 5, and 10 as follows:

1. (Currently Amended) A method for measuring molecular movement in a cell, comprising:

contacting a cell with a compartment marker and with a molecular marker[[,]]; imaging the marked cell with a detector[[,]];

creating a compartment mask[[,]]; and

[correlate] <u>correlating</u> said compartment mask and said molecular marker to measure molecular movement in a cell.

- 2. (Original) The method of claim 1 wherein there is relative motion between the cell and the detector.
- 3. (Original) The method of claim 1 wherein the molecular marker is a fluorescent labeled antibody.
- 4. (Original) The method of claim 1 wherein the compartment marker is a fluorescent molecule.
- 5. (Currently Amended) The method of claim 1 wherein the compartment <u>marker</u> is <u>a</u> nucleus, cytoplasm, or <u>a</u> membrane.
 - 6. (Original) The method of claim 1 wherein the molecule marked is NF-κB.
- 7. (Original) The method of claim 1 further comprising the step of inducing molecular movement in the cell.
- 8. (Original) The method of claim 7 wherein the induced molecular movement is nuclear translocation.
- 9. (Original) The method of claim 7 wherein the molecular movement is induced with LPS or IL-1 β /TNF- α .

10. (Currently Amended) A method for measuring nuclear translocation in a cell, comprising:

contacting a cell with a nuclear marker and with a molecular marker[[,]]; imaging the marked cell with a detector, creating a nuclear mask[[,]]; and correlate correlating said nuclear mask and said molecular marker to measure molecular movement in a cell.

- 11. (Original) The method of claim 10 wherein there is relative motion between the cell and the detector.
- 12. (Original) The! method of claim 10 further comprising the step of inducing molecular movement in the cell.
- 13. (Original) The method of claim 12 wherein the induced molecular movement is nuclear translocation.
- 14. (Original) The method of claim 12 wherein, the molecular movement is induced with LPS or IL-1 β /TNF- α .
 - 15. (Original) The method of claim 10 wherein the nuclear marker is 7-AAD.
 - 16. (Original) The method of claim 10 wherein the molecule marked is NF-κB.
- 17. (Original) The method according to any one of claims 1-16 wherein the images are collected simultaneously.
- 18. (Original) The method according to any one of claims 1-16 wherein the detector is a time delay integration charge-coupled detector.